Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (Withdrawn) A method for regenerating *Acacia mangium* comprising:
 - a) inducing callus formation from an explant;
 - b) culturing said callus to produce adventitious buds;
- c) culturing said adventitious buds to elongate and produce pinnate leaves; and
- d) culturing elongated buds of step (c) such that they produce roots and become plantlets.
- 2. (Withdrawn) The method of claim 1 wherein seeds are cultured to produce said explant.
- 3. (Withdrawn) The method of claim 1 wherein said explant is selected from the group consisting of hypocotyls, cotyledons, leaves, petioles and stems.
- 4. (Withdrawn) The method of claim 1 wherein said explant is cultured on a medium comprising MS medium supplemented with an auxin and a cytokinin.
- 5. (Withdrawn) The method of claim 4 wherein said auxin is present at 0.5-2.0 mg/L and said cytokinin is present at 0.5-3.0 mg/L.
- 6. (Withdrawn) The method of claim 4 wherein said auxin is selected from the

group consisting of 2,4-D and α -naphthaleneacetic acid and wherein said cytokinin is selected from the group consisting of kinetin and 6-benzylaminopurine.

- 7. (Withdrawn) The method of claim 1 wherein said callus is cultured on a medium comprising MS basic medium supplemented with a) thidiazuron, b) indole acetic acid, c) casein enzymatic hydrolysate, d) L-ascorbic acid, e) L-glutamine, f) L-asparagine, g) L-proline, h)sucrose and i) agar or phytagel.
- 8. (Withdrawn) The method of claim 1 wherein said adventitious buds are cultured on a medium comprising MS medium supplemented with a) thidiazuron, b) casein enzymatic hydrolysate, c) L-ascorbic acid, d) L-glutamine, e) L-asparagine, f) L-proline, g) sucrose and h) agar or phytagel.
- 9. (Withdrawn) The method of claim 1 wherein said elongated buds are cultured on a medium comprising 1/2 MS basic medium supplemented with a) α-naphthaleneacetic acid, b) kinetin, c) casein enzymatic hydrolysate, d) L-ascorbic acid, e) L-glutamine, f) L-asparagine, g) L-proline, h) sucrose and i) phytagel.
- (Withdrawn) The method of claim 1 wherein said explant has been transformed.
- 11. (Withdrawn) A method for regenerating Acacia mangium comprising:a) culturing auxiliary buds from an Acacia mangium tree to produce adventitious buds comprising phyllodes;
 - b) subculturing said adventitious buds comprising phyllodes to produce adventitious shoots:

- c) culturing said adventitious shoots.
- 12. (Withdrawn) The method of claim 11 wherein said culturing of auxiliary buds is performed on a medium comprising MS basic medium supplemented with a) α-naphthaleneacetic acid, b) 6-benzylaminopurine, c) casein enzymatic hydrolysate, d) L-ascorbic acid, e) L-proline, f) L-asparagine, g) L-glutamine, h) sucrose, and i) phytagel or agar.
- 13. (Withdrawn) The method of claim 11 wherein said subculturing of adventitious buds comprising phyllodes is performed on a medium comprising MS basic medium supplemented with a) 6-benzylaminopurine, b) casein enzymatic hydrolysate, c) L-ascorbic acid, d) L-glutamine, e) L-asparagine, f) L-proline, g) sucrose and h) phytagel or agar.
- 14. (Currently Amended.) A method of transforming *Acacia mangium* with a gene of interest comprising the steps of:
 - a) activating *Agrobacterium tumefaciens* comprising said gene of interest <u>by</u> <u>culturing said *Agrobacterium* in induction medium comprising acetosyringone;</u>
- b) preculturing an explant of *Acacia mangium* selected from the group comprising a stem, a leaflet, a petiole and a bud in medium comprising supplemented basic MS medium, wherein said explant is soaked in 0.5 M mannitol prior to the co-cultivation;
 - c) co-cultivating said activated *Agrobacterium tumefaciens* and said precultured explant <u>in medium comprising supplemented basic MS medium</u> to produce infected explants;
- d) culturing said infected explants <u>in medium</u> comprising <u>supplemented basic</u>

 <u>MS</u> to induce callus and adventitious buds; and

e) culturing said callus or adventitious buds on a selective medium comprising

supplemented basic MS medium;

wherein in said supplemented basic MS medium comprises a) thidiazuron, b) indole-3-acetic acid, c) casein enzymatic hydrolysate, d) L-ascorbic acid, e) L-glutamine, f) L-asparagine, g) L-proline, h) sucrose and l) phytagel or agar.

- 15. (Canceled.)
- 16. (Canceled.)
- 17. (Canceled.)
- 18. (Original.) The method of claim 14 wherein said co-cultivating is performed in the dark.
- 19. (Canceled.)
- 20. (Original.) The method of claim 14 wherein said preculture is performed using a photoperiod of 16 hours light/8 hours dark.
- 21. (Original.) The method of claim 14 wherein said culturing on selective medium is performed using a photoperiod of 16 hours light/8 hours dark.
- 22. (Canceled.)
- 23. (Original.) A method for promoting elongation of transformed adventitious buds of *Acacia mangium* comprising transforming an *Acacia mangium* explant

by the method of claim 14 and further comprising a step of addition of gibberellic acid to the culture medium following formation of adventitious buds.

- 24. (Original.) A method for promoting pinnate leaf formation on transformed adventitious buds of *Acacia mangium* comprising transforming an *Acacia mangium* explant by the method of claim 14 and further comprising culturing adventitious buds which develop on a medium with gibberellic acid.
- 25. (Withdrawn) A method for promoting root formation from transformed adventitious buds comprising culturing transformed adventitious buds on a medium comprising 1/2 MS basic medium supplemented with a) α-naphthaleneacetic acid, b) kinetin, c) casein enzymatic hydrolysate, d) L-ascorbic acid, e) L-glutamine, f) L-asparagine, g) L-proline, h) sucrose and i) phytagel.
- 26. (Withdrawn) The method of claim 25 wherein said culturing is performed using a 16 hour light/8 hour dark photoperiod.
- 27. (Withdrawn) The method of claim 25 wherein said culturing is performed at 28°C.
- 28. (Currently Amended.) A method of preparing transgenic *Acacia mangium* cells comprising the steps of
- a) preculturing stem pieces of *Acacia mangium* in a culture medium comprising supplemented basic MS medium, wherein said stem pieces are soaked in 0.5M mannitol prior to co-cultivating with *Agrobacterium tumefaciens*; and
- b) co-cultivating said stem pieces of step (a) with activated Agrobacterium tumefaciens in culture medium AM-265, wherein said Agrobacterium was activated

Serial No. 09/936,612 Filed: January 2, 2002

Page 7

by culturing the *Agrobacterium* in induction medium comprising acetosyringone prior to said co-cultivation.

- 29. (Original.) The method of claim 28 wherein said preculturing is performed for 3 days using a photoperiod of 16/8 hours (light/dark).
- 30. (Original.) The method of claim 29 wherein said preculturing is performed using 1800-2000 lux for the light cycles.
- 31. (Original.) The method of claim 28 wherein said preculturing is performed at 28°C.
- 32. (Canceled.)
- 33. (Canceled.)
- 34. (Currently Amended.) The method of claim 28 wherein said *Agrobacterium* tumefaciens was activated by growing the *Agrobacterium* in induction medium, at 28°C in the dark.
- 35. (Canceled.)
- 36. (Canceled.)
- 37. (Withdrawn) A method of making transgenic *Acacia mangium* plants comprising;
 - a) preparing transgenic Acacia mangium cells by the method of claim 28;
 - b) culturing said cells in a selective medium,

Serial No. 09/936,612 Filed: January 2, 2002 Page 8

- c) adding a growth promoter; and
- d) rooting buds which develop.
- 38. (Withdrawn) The method of claim 37 wherein said selective medium comprises an antibiotic.
- 39. (Withdrawn) The method of claim 37 wherein said culturing is performed for more than 1 month.
- 40. (Withdrawn) The method of claim 37 wherein said growth promoter is gibberellic acid.
- 41. (Withdrawn) A transgenic Acacia mangium cell.
- 42. (Withdrawn) A transgenic Acacia mangium plant.